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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/712,069

11/13/2003

Michael J. Czaplicki

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07/19/2006

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EXAMINER

AFZALI, SARANG

ART UNIT

PAPER NUMBER

3726

DATE MAILED: 07/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/712,069

Applicant(s)

CZAPLICKI ET AL.

Examiner

Sarang Afzali

Art Unit

3726

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 11-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 16-19 is/are rejected.
- 7) ☒ Claim(s) 20-21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 3/1/2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>05272004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I drawn to claims 1-10, in the reply filed on 05/04/2006 is acknowledged.

The traversal is on the ground(s) that according to the Applicant claims 11-15 are merely a species within the broader genus of claim 1 and that, as such, the assertion of combination/subcombination by the Election/Restriction Requirement is improper. Moreover, search of all of claims 1-15 is not overly burdensome due the relationship between claim 1 and claims 11-15.

This is not found persuasive because as set forth in the restriction requirement, the two groups are related as combination and subcombination and the inventions of this relationship are distinct since the combination (Group II) does not require the particulars of the subcombination (Group I) for patentability and the subcombination has indeed separate utility such as use in a combination other than "an automotive vehicle". Also, the search required for each of the Group are dissimilar enough to show an undue burden on the examiner.

The requirement is still deemed proper and is therefore made FINAL.

Claims 11-15 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 05/04/2006.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: Reference numeral 48 as recited in specification on page 14, line 29 is not shown on any of the figures. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-3, 5-6, 8-10 and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Czaplicki et al. (US 2004/0124553).

The applied reference has a common Inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

As applied to claim 1, Czaplicki et al. ('553) teach a process of forming an assembly comprising the steps of:

providing a thermosettable material, the material being selected from a sheet molding compound (paragraph [0049], lines 6-7), molding (paragraph [0012], lines 1-2) the thermosettable material to form a carrier member (paragraph [0017], line 3);

applying an activatable material to a surface of the carrier member for forming a reinforcement sealing or baffling member (paragraph [0013], lines 1-3);

placing the reinforcement, sealing or baffling member within a cavity or adjacent to a surface of an article of manufacture, the cavity or surface being defined by one or more walls of a structure of the article of manufacture (paragraph [0014], lines 1-4) ; and

activating the expandable material to form a foam that is adhered to the carrier member and the surface or walls of the structure of the article of manufacture (paragraph [0015], lines 1-4).

As applied to claim 2, Czaplicki et al. ('553) teach a process wherein the carrier is made of thermosettable material and also include polyester (paragraph [0018], line 4).

As applied to claim 3, Czaplicki et al. ('553) teach a process wherein the thermosettable material is a molding compound (paragraph [0049], lines 6-7) and the thermosettable used as carrier is between about 30% and about 60% by weight of thermosettable material (paragraph [0017], lines 6-9).

As applied to claims 5 and 6, Czaplicki et al. ('553) teach a process wherein the carrier member made of thermosettable material includes glass fibers (claim 10, line 3).

As applied to claim 8, Czaplicki et al. ('553) teach a process wherein the activatable material is an expandable material (paragraph [0015], line 1).

As applied to claim 9, Czaplicki et al. ('553) teach a process wherein the step of molding the carrier member made of thermosettable material includes compressing the molding compound in a die.

Note, that when the carrier member is made by extrusion (paragraph [0021], line 3) the molding compound is extruded by compressing it through the extrusion dies.

As applied to claim 16, Czaplicki et al. ('553) teach a process wherein the article of manufacture is an automotive vehicle and the structure is a pillar of the automotive vehicle (paragraph [0042], lines 5-10);

the thermosettable material is based upon a polyester (paragraph [0018], line 4);

the step of molding the material is carried out at an elevated temperature in a heated mold (paragraph [0021], lines 1-3, both injection molding and extrusion processes is carried out at elevated temperature in a heated mold); and

the reinforcement, sealing or baffling member, upon activation and adhesion of the expandable material provides reinforcement to the structure of the automotive vehicle (paragraph [0010], lines 7-9).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Czaplicki et al. ('553) in view of Schmidt et al. (US 3,692,620). Czaplicki et al. ('553) teach the claimed invention with the exception of explicitly teaching the material of the curing agent. However, Schmidt et al. teach a method of making laminated boards by molding a thermosettable material (polyester resin, col. 3, lines 46-52) wherein benzoyl peroxide is used as curing agent (col. 3, lines 58-59). It would have been obvious to one of ordinary skill in the art at the time of invention to have provided Czaplicki et al. ('553) with a curing agent as taught by Schmidt et al. in order to provide an effective means of setting and hardening the molded thermosetting resin.

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7. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Czaplicki et al. ('553). Czaplicki et al. ('553) teach the claimed invention with the exception of explicitly teaching that greater than 50% of the fibers have a length greater than about 1.5 inches.

It would have been obvious matter of design choice to use a length of greater than about 1.5 inches for greater than 50% of the fibers used, since applicant has not disclosed that only the above mentioned length can be used to resolve any stated problem and further states that the fibers for the reinforcement material may be highly variable in length depending on the molding compound and depending upon the processing that the molding compound will undergo (specification, page 5, lines 5-7), therefore, it appears that the invention would perform equally well with other lengths as one with ordinary skill in the art finds suitable to use in order to provide adequate and effective fiber length for adequate number of grains resulting in a strong reinforcement material used in a particular process.

8. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Czaplicki et al. ('553) in view of Agrawal et al. (US 5,707,473).

As applied to claim 17, Czaplicki et al. ('553) teach the claimed invention including that the activatable material can easily be attached to the carrier member through fastening means which are well known in the art (paragraph [0032], lines 11-15) and that the activatable material (expandable material 30, paragraph [0040], lines 1-24)

can be delivered and placed in contact with the assembly members (i.e. carrier member) through a variety of delivery systems.

However, Czaplicki et al. ('553) do not explicitly teach the step of bonding the activatable material to the surface of the carrier member while the temperature of the carrier member is declining.

It would have been obvious matter of design choice to use any suitable method of attaching and bonding the activatable material to the carrier member, since applicant has not disclosed that only the above mentioned method can be used to resolve any stated problem, it appears that the invention would perform equally well with other attaching means as one with ordinary skill in the art finds suitable to use in order to provide an adequate and effective bonding between the activatable material and the carrier member.

Furthermore, note that Agrawal et al. teach a method for bonding an attachment member to a substrate in order to make a panel assembly wherein the bond between the attachment member and the substrate is achieved by an adhesive, set cured or hardened by the addition of heat, prior to, during and/or after the molding process (col. 3, lines 14-17).

It would have been obvious to one of ordinary skill in the art at the time of invention to have provided Czaplicki et al. ('553) with the bonding and adhering step as taught by Agrawal et al. in order to provide an effective bonding between the two members of an assembly.

As applied to claim 18, Czaplicki et al. ('553) teach a process wherein the activatable material is applied to the carrier member as a plurality of shaped pieces (Fig. 4, activatable materials 120 and 122).

9. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Czaplicki et al. ('553) in view of Agrawal et al. and further in view of Wycech (US 6,332,731).

Czaplicki et al. ('553)/Agrawal et al. teach the claimed invention including that the activatable material can be delivered and placed in contact with the assembly members (i.e. carrier member) through a variety of delivery systems.

It would have been obvious matter of design choice to use any suitable fixture or device to support the carrier member in order to apply the activatable material to it. Furthermore, it is inherent that something (such as a fixture or device) is supporting the carrier member during the application of the activatable material on to it, even though that fixture is a tabletop or a palm of a hand.

Furthermore, note that Wycech teaches a method for reinforcing a hollow structure of an automotive vehicle wherein a fixture (mold 52, Fig. 5) is used to support carrier (36) in order to apply the activatable material (adhesive layer 38) on to it in order to provide a uniform sized and desired thickness (col. 5, lines 51-57).

It would have been obvious to one of ordinary skill in the art at the time of invention to have provided Czaplicki et al. ('553)/Agrawal et al. with a suitable fixture as taught by Wycech in order to provide an effective bonding between activatable material to the carrier member.

Allowable Subject Matter

10. Claims 20 and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarang Afzali whose telephone number is 571-272-8412. The examiner can normally be reached on 7:00-3:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on 571-272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

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USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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